(12) UK Patent Application (19) GB (11) 2 305 844 (13) A

(43) Date of A Publication 23.04.1997

(21)	Application No 9520521.7	(51)	INT CL ⁶ A23L 1/19 , A21D 13/00
(22)	Date of Filing 04.10.1995	(52)	UK CL (Edition O)
(71)	Applicant(s)		A2B BMD4
· · · ·	Foodinvest Group Srl	(56)	Döcuments Cited GB 2197777 A EP 0237436 A2
	(Incorporated in Italy)	- [GB 2197777 A EF 0237438 A2
	64020 Teramo - Zona Industriale S., Atto, Italy	(58)	Field of Search UK CL (Edition N.) A2A A2, A2B BMD3 BMD39 BMD4 BMD9 BMP1 BMP5
(72)	Inventor(s) Aristide Romano Malavolta		INT CL ⁶ A21D 13/00 , A23L 1/19 Online : WPI
	Antonio Maiorano		Olling . W.
(74)	Agent and/or Address for Service Lloyd Wise, Tregear & Co	1	
	Commonwealth House, 1-19 New Oxford Street, LONDON, WC1A 1LW, United Kingdom		
	1	- 1	

(54) Cream filling for sponge cakes

⁽⁵⁷⁾ A cream composition for sponge cakes includes milk proteins, condensed milk and hydrogenated plant fats among its ingredients.

FOODSTUFF

The present invention relates to the field of foodstuffs and more particularly to milk sweets of the slice type and specifically to the composition of a cream for milk slices.

As used herein, by "slice" is meant a sweet made up of two sponge-cake slices, between which a cream stuffing is interposed, like a sandwich.

In particular, milk slices are distributed on the market and widely known to the consumer, in which the two sponge-cake slices are cocoa slices and the stuffing cream is a milk cream, possible with the addition of honey.

As used herein, by "milk sweet of the slice type" or also "milk slice" is meant a slice in which the stuffing cream is a milk cream.

The preparation of slices, particularly of milk slices, comprises the following working stages. As regards sponge-cake slices: preparation of the relevant batter, extrusion in a continuous way on a tape, baking in an oven, separation from the tape and cooling. As regards the cream: cold homogeneous preparation of the mix and extrusion. The sponge-cake and the cream meet at the output from said two respective sequences of working stages, to give place to the metering of the cream on sponge-cake making up a base layer, followed by superimposition by overturning on the so obtained assembly of an upper sponge-cake layer. Slices are then obtained by cutting and are subsequently packed in a plastic film (flow pack), or enveloped (heat sealed pack).

Typical milk slice ingredients are: pasteurized fresh milk, plant fats, sugar, flour, powder skim-milk, honey,

anhydrous butter, powdered eggs, fine bran, lean cocoa, emulsifying agents (mono and diglycerides of fatty acids), wheat gluten, natural flavours, salt and leavening powder.

Milk slices have the advantage of a considerable income of proteins and calcium and of being particularly liked by children, typically eaten between means.

A taste feature of primary importance of a slice is its softness.

An important characteristic is also the stability of the colloidal dispersion of the stuffing cream.

In accordance with the present invention, we provide a cream composition for milk sweets of the slice type or milk slices, characterized in that it comprises condensed milk, milk proteins and hydrogenated plant fats among its ingredients.

We have found that we can make a milk sweet of the slice type or milk slice with such a cream composition as stuffing having a sensibly softer consistency than generally heretofore.

We have also found our milk sweets of the slice type or milk slice to have a dispersion of the stuffing cream substantially more stable than for milk slices generally known heretofore.

Composition and preparation are simple.

Our compositions rely upon use of condensed milk, milk proteins and hydrogenated plant fats among the ingredients in the stuffing cream composition.

The use of condensed milk allows us to use lesser

liquid quantities in the preparation of the stuffing cream which affords the possibility of a softer consistency. Thirty six (36) parts of integral milk are equivalent to twelve (12) parts of condensed milk whereto twenty four (24) parts of water have been added.

The use of milk proteins substitutes for powdered skimmed milk. We find that milk proteins give a more esteemed product, are easily soluble in water and substantially contribute to the aforesaid better stability of the colloidal dispersion of the cream.

Plant fats contribute too to the consistency and the structural stability of the cream.

In cream compositions according to the present invention neither gluten nor butter are necessary ingredients.

It is particularly envisaged that the condensed milk is integral condensed milk.

It is more particularly envisaged that the integral condensed milk is present in an amount of between 10% and 15% by weight of the cream composition; said milk proteins are present in an amount of between 5% and 6% by weight of the cream composition; and said hydrogenated plant fats are present in an amount of between 30% and 50% by weight of the cream composition.

It is particularly envisaged that the integral condensed milk is sugared integral condensed milk.

It is more particularly envisaged that the sugared integral condensed milk is present in an amount of between 10% and 15% by weight of the cream composition and comprises eight (8) parts of sugar for twelve (12) parts of integral

condensed milk; said milk proteins are present in an amount of between 5% and 6% by weight of the cream composition; and said hydrogenated plant fats are present in an amount of between 30% and 50% by weight of the cream composition.

The present invention will be best understood based upon the following detailed disclosure of its preferred embodiment, given by way of example only.

Milk slices were prepared from a base of an oven product made up of slices of cocoa sponge cake and milk and honey stuffing cream including sugared condensed milk, milk proteins and hydrogenated plant fats as its ingredients. The sugared condensed milk was present in the percentage of 10-15% by weight of the cream with eight parts of sugar for twelve parts of integral condensed milk; milk proteins were milk proteins obtained through special processes and present in a quantity of between 5% and 6% by weight of the cream, and hydrogenated plant fats were present in a quantity of between 30% and 50% by weight of the cream.

The obtained product after about an hour standing at room temperature exhibited a consistency sensibly softer than those known at the present day.

The use of condensed milk allowed to us to introduce lesser quantities of liquid than usual heretofore.

The milk proteins gave better stability to the colloidal dispersion.

The hydrogenated plant fats contributed too to the stability of the cream and to the soft consistency of the product.

Butter and gluten were not necessary.

<u>CLAIMS</u>

- 1. A cream composition for milk sweets of the slice type or milk slices, characterized in that it comprises condensed milk, milk proteins and hydrogenated plant fats among its ingredients.
- 2. A cream composition according to Claim 1, wherein said condensed milk is integral condensed milk.
- 3. A cream composition according to Claim 2, wherein said integral condensed milk is present in a quantity of between 10% and 15% by weight of the cream composition; said milk proteins are present in a quantity of between 5% and 6% by weight of the cream composition; and said hydrogenated plant fats are present in a quantity of between 30% and 50% by weight of the cream composition.
- 4. A cream composition according to Claim 2, wherein said integral condensed milk is sugared integral condensed milk.
- 5. A cream composition according to Claim 4, wherein said sugared integral condensed milk is present in a quantity of between 10% and 15% by weight of the cream composition, and comprises eight parts of sugar for twelve parts of integral condensed milk; said milk proteins are present in a quantity of between 5% and 6% by weight of the cream composition; and said hydrogenated plant fats are present in a quantity of between 30% and 50% by weight of the cream composition.
- 6. A cream composition substantially as hereinbefore described.
 - 7. A milk sweet of the slice type, characterized in

that it is stuffed with a milk cream having a composition according to any one of the preceding claims.

8. A milk sweet of the slice type substantially as hereinbefore described.

Patents Act 1977 Examiner's report (The Search report	to the Comptroller under Section 17	Application number GB 9520521.7	
Relevant Technical	Fields	Search Examiner K J KENNETT	
(i) UK Cl (Ed.N)	A2A (A2), A2B (BMD3, BMD4, BMD9, BMD39; BMP1; BMP5)		
(ii) Int Cl (Ed.6)	A21D 13/00; A23L 1/19	Date of completion of Search 4 DECEMBER 1995	
Databases (see below) (i) UK Patent Office collections of GB, EP, WO and US patent specifications.		Documents considered relevant following a search in respect of Claims:-	
(ii) ONLINE: WPI			

Categories of documents

X:	inventive step.	P:	date but before the filing date of the present application.
Y:	Document indicating lack of inventive step if combined with one or more other documents of the same category.	E:	Patent document published on or after, but with priority date earlier than, the filing date of the present application.

A: Document indicating technological background and/or state of the art.

&: Member of the same patent family; corresponding document.

Category	Identity	Relevant to claim(s)	
A	GB 2197777 A	(FERRERO) whole document	1
A	EP 0237436 A2	(NABISCO) pages 1-6	1
•			
		ч	
			_

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).